

handicap, the handicap remains for the forty percent of viewers without cable, and because cable originated services capture a significant portion of the audience with access to cable, in terms of percentage of the broadcast audience affected, the effect of the UHF handicap is much larger than 60 percent cable penetration would suggest. Cable channels draw approximately 40 percent of the audience comprised of cable subscribers.⁶⁷ As a result, it is more appropriate to think of cable as offsetting the technical handicap of UHF stations for 47 percent of the 76 percent of television viewers who are typically watching a local broadcast channel.⁶⁸

When some stations' signals reach more viewers than others, maximization of viewer welfare requires that the most popular programs be carried on the most powerful stations. However, because competition among stations takes place on the basis of profitability, not audience appeal, there is good reason to expect that if the off-network provision of the Rule is eliminated, we will see some first run programs displaced by less popular off-network on network affiliates that typically are the strongest stations in their markets. The programs displaced will either migrate to weaker UHF stations, where in the

⁶⁷ National Cable Television Association, Cable Television Developments, Fall 1994 reports that the viewing shares of cable households for basic cable networks and pay cable services are 36% and 8%, respectively. This gives an approximately basic cable network and pay cable services combined a 40% viewing share of cable households.

⁶⁸ In figuring out the handicap of UHF stations relative to VHF stations and the extent to which cable offsets the technical handicap, it is necessary to exclude the portion of the audience that both lose to cable. With sixty percent cable penetration and a forty percent audience share for cable services, UHF stations and VHF stations compete even up for $0.6 \times 0.6 = 0.36$ of television households subscribing to cable and UHF stations compete at a technical handicap for the remaining 40 percent of television households. $0.40 / (.36 + .40) = 0.53$, or 53% of the broadcast audience for which the UHF technical handicap is not diminished by cable.

long run smaller audiences will mandate smaller budgets and lower production values, or those programs will leave the air entirely.

Extending our model to add a second station and an additional program shows why this is likely to occur. Consider first the effect of adding an additional program, less popular than the original two (i.e., $x < r_s < r_h$), which, because its option is not being shown at all, is available to the station at its opportunity cost. Broadcasting the third program on these terms would contribute x to the station's profits.

Note that the presence of the third program doesn't affect the outcome of the competition between the first run program and the off-network program. Consider the situation where the first run program is more popular and $r_h - r_s < c$. Competitive bidding will still lead them to lower their prices to the station until the off-network program's contribution to station profits exceeds x , which is possible because $r_s > x$. Whether competition leads to the first run program making an offer that would contribute more than x to station profits depends on whether $r_h - c$ is greater than or less than x . But the competition between the first run program and the off-network program is unaffected by the third program. The off-network program always wins for the same reason as before -- because $r_h - r_s < c$. Thus Williamson and Woroch's contention that allowing for more programs reduces the bias against more popular first run programs is incorrect.

Now assume the station we have been considering is a VHF station and add another station, which is UHF. Because of its weaker signal, all revenues associated with having various programs on the VHF station are multiplied by a factor $\beta < 1$ to get the revenues for the same programs on the UHF station. Thus

r_h becomes βr_h , r_s becomes βr_s , and x is βx , if these programs are on the UHF station. Assume the off-network program is on the VHF station and generating revenue of r_s initially. Assume the supplier of the first run program with r_h program bids against the off-network program for clearance on the VHF station by offering the program for a price, P . We are interested in the conditions under which the supplier of the first run program can find a value of P that allows it to profitably displace the off-network program -- or at least break even in doing so. For this to happen, the value of P must satisfy the following three conditions:

- (1) $r_h - P > x$.
- (2) $P > c$.
- (3) $P - (r_h - r_s) \leq \beta(r_s - x)$.

The first condition just says that P must be low enough that the revenue left to the station after paying P for the first run program exceeds its revenue with the third program. The second condition says P must be large enough for the supplier of the first run program to cover its production costs. If the supplier of the off-network program is to be competitive with the offer of the first run program at P , it will offer a price of $r_h - r_s$ less than P because the off-network program generates this much less revenue. The third condition says this price ($P - (r_h - r_s)$) must be less than what the off-network program could earn by selling the program to the UHF station instead. If P is set too high for (3) to be satisfied, the supplier of the off-network program will start bidding against the first run program by lowering its price until (3) is satisfied. So we would expect (3) to be satisfied as an equality.

Combined, (1) and (2) give us $r_h - x > c$. That is, the first run program's revenue on the VHF station must exceed that station's profits with the third program by more than c . If this condition is not satisfied, the first run program will lose out in competition with either of the alternatives and will not be shown on either station.⁶⁹ The presence of a second station doesn't even guarantee that the more popular first run program will be shown on the weaker station, let alone the stronger station.

Rearranging (3) we get $P = (r_h - r_s) + \beta(r_s - x)$. There is no guarantee that this expression will have a value greater than c . We earlier found that when $(r_h - r_s < c)$, off-network programming will always prevail over first run: this is the condition that leads to welfare problems in the single station analysis. A second station relaxes this constraint by $\beta(r - x)$, but as long as there are fairly good substitutes for the best off-network program, the situation hasn't improved much.

EI responded to the LECG analysis of the comparative benefits of first run and off-network syndicated programs with a rather confused argument that favoring first run programs in the access period reduces the revenue potential for off-network programs, and this reduces investments in and the popularity of prime-time network programs. The favoritism referred to is the fact that during the access period off-network programs are relegated to the largely UHF independent stations available in most major television markets. Thus this argument implicitly contradicts EI's adamant claim in its initial PTAR report that UHF stations do not suffer from a handicap relative to the VHF stations that networks always affiliate with when they have a choice.

⁶⁹ If $r - x < c$, then $\beta(r - x) < c$.

Whether allowing network programs on the affiliated stations which EI claims do not have an advantage over UHF independents would add enough additional value to network programs' prime time runs to warrant displacing the first run programs which are more popular in syndication is an empirical, not a theoretical question, for which EI provides no data. If the opening of the access period to off-network syndication were to lead to the production of substantially more popular network programs, one would expect this to be reflected in an increase in the ratio of the size of the television audience during network prime time to the size of the television audience during the access period. While EI's calculations of this ratio show that such a change did appear⁷⁰ immediately after the enactment of PTAR, which they attribute to first run programs being of lower quality than network programs, our own calculation of this ratio from the 1984/85 season on shows that whatever short-run effect PTAR might have had had disappeared by the mid 1980s. This time series is reported in **Table IV-2** below.

Besides claiming incorrectly that LECG's analysis of the off-network provision does not allow for off-network syndication to contribute to the production costs of network programs, Williamson and Woroch respond by basically replicating the analysis in simplified form to show that stations will pay more for first run programs that are of higher quality (more popular) than their off-network competitors, a point already made in the more elaborate LECG analysis. What they miss in focusing on program quality as perceived by television stations is that what stations are willing to pay for programs reflects the profitability of programs, but ignores the benefits of more popular programs

⁷⁰ We use the word appear because EI reports the ratio for only two post-PTAR years, 1972/73 and 1976/77, and our own investigation of this ratio for the 1980s and 1990s shows that it is highly variable.

to viewers. First run programs viewed as equal in value to off-network programs by stations are seen as superior by viewers. Thus Williamson and Woroch's analogy to competition between new and used books is totally inappropriate because both types of books are supported entirely by reader payments.

4. The UHF handicap.

Some of EI's criticisms are unfounded when considered from an econometric perspective. The argument that all of the data was not used in estimating the UHF handicap is an example. When potential samples are large no one uses all of the available data. Instead econometricians try to get a sample size large enough to provide confidence in the estimates. LECG's regression analysis controls for a variety of factors not controlled in EI's claimed replication of Park's study, including day of the week, time period, individual program being shown (which should have an effect if audience loyalty varies among programs), and, because their schedules are the same across the country, programs shown by the affiliates of competing networks. The fact that variables included by Park were left out of the EI regressions renders all but their UHF affiliate handicap estimate (which was negative and significant) uninterpretable. Most critical was their failure to distinguish between independent stations, including popular superstation WTBS, imported by cable systems because they are more heavily viewed than less popular local independents. For the most part, the WW estimates of a UHF handicap are consistent with LECG's. The notion that learning by doing could overcome a technical handicap, however, is nonsensical, because all stations should be equally able to benefit from learning, regardless of their technical handicap.

B. ASSESSING THE OPPORTUNITY COST OF PTAR

The principle study in the Proceeding offering a direct assessment of the cost side of the PTAR cost-benefit analysis is presented in EI's March 7, 1995 submission. EI argues that network distribution of programs is more efficient than distribution by syndicators. It offers various quantitative measures of the consequences of the presumed inefficiencies introduced by PTAR.

EI offers three quantitative assessments of PTAR's effects: (1) The so-called Tuesday experiment during the 1971-72 season when the networks programmed the 7:30-8:00 PM "access period" time slot on Tuesdays but not on other weekdays; (2) A comparison of pre- and post-PTAR ratios of households using television during the access period (7:30-8:00 PM) to the corresponding number for the following half hour (8:00-8:30 PM); and (3) An attempt to estimate the viewer surplus lost due to the substitution of syndicated programs for network programs during the access period using data reported by Noll, Peck, and McGowan⁷¹.

We show that after correcting for various errors and omissions in the EI analysis, it is not possible to demonstrate any significant ongoing costs to viewers due to PTAR. Furthermore, the costs incurred during the immediate post-PTAR adjustment period were relatively small and are hard to document at all, at least using the approaches employed by EI. When the implications of what we know about the economics of television are considered more closely, so that the comparative advantages of both network and syndicated programs are examined, rather than just network programs as was done by EI, it is easy to see

⁷¹ Noll, Peck, and McGowan (1973), p. 288.

why the cost component of the PTAR cost-benefit equation is likely to be so small.

As Williamson and Woroch point out in their reply comments⁷² the fact that during the 1971-72 season the Networks started their prime time schedules at 7:30 on Tuesdays but at 8:00 on other days in no way constitutes a valid experiment testing the impact of PTAR. The programs starting at 7:30 on Tuesday nights were well-established and already popular hour-long programs that carried through the 8:00 to 8:30 time slots. The loyal viewers of these programs had to tune them in a half hour earlier than before.

Furthermore, one could hardly expect network affiliates and producers of syndicated programs to fully respond to the need to program the access period in the first year of the rule. In fact, this is a problem that taints all of EI's data and analysis, since they do not examine audience trends past the 1976-77 season, while PTAR was passed in 1970 with the provision that it be reviewed four years after implementation to determine whether it should be made permanent. As a result, "the studios and most major independent production companies did not at first rush to produce programming for the access period for fear the rule would be repealed."⁷³ Thus, at best in all of its analyses EI gives us data only for the second year after markets had begun to seriously address the long term implications of PTAR.

⁷² Williamson and Woroch (1995), pp. 40-41.

⁷³ Harold N. Brook (1987), "Television Syndication: What is it? Where did it come from? And, why is everyone talking about it?" in Television Syndication: A Practical Guide to Business and Legal Issues, V. S. Van Petten, ed., Los Angeles: Los Angeles County Bar Association, pp. 25-87. Quoted passage from pp. 29-30.

The error introduced by EI in failing to analyze audience trends beyond the 1976-77 season is also quite evident when one extends their time series of the ratio of households using television for the access period and the immediately following half hour into the 1980s and beyond. We have done this in **Table IV-2**. **Table IV-2** reports this ratio for Tuesdays and for the aggregate of the other weekdays. For the 1969/70 season the Tuesday value of this ratio exceeded its value on the other weekdays by fully two-thirds of the difference EI highlighted for the 1972/73 season. EI obscured this relationship by averaging the audience measures for the two pre-PTAR years it reports. The access period audience did fall relative to 8:00-8:30 audience immediately following the enactment of PTAR and this relationship was also evident during the 1976/77 television season, the only other season for which EI reported data.⁷⁴ However, as **Table IV-2** demonstrates, by the mid-1980s this ratio was back to its pre-PTAR level and in a number of years exceeded its pre-PTAR value. Furthermore, there is enough variability in this series that one can easily find other three year periods during which the ratio either rose or fell by as much as it did during the three years reported by EI.

Based on a more complete analysis--rather than EI's highly selective short run analysis--viewers measured by households using television, currently suffer no welfare loss from the substitution of first run syndicated programs for network programs during the access period. That is, if we took ratios of households using television during the access period and for the 8:00-8:30 time period as an index of the benefits to viewers of allowing networks to once again

⁷⁴ In their initial comments, EI presented ratios of access period viewing to succeeding period viewing for the 69/70 through 72/73 seasons, then skipped to the 76/77 season. As **Table IV-2** shows, there is sufficient year-to-year volatility in this ratio that it is not safe to presume that the ratio stayed near its 72/73 value in the intervening years.

program the access period, then the more recent audience measures (ignored by EI) suggest that viewers wouldn't benefit at all from repealing PTAR.

Table IV-2 Comparison of Access Period to Later Prime Time Viewing						
	Tuesday Evenings			Other Weekday Evenings		
TV Season	7:30-8:00	8:30-9:00	Ratio	7:30-8:00	8:30-9:00	Ratio
69/70	63.26	66.17	0.956	60.49	63.83	0.948
70/71	63.16	66.23	0.954	61.48	64.43	0.954
71/72	62.79	65.93	0.952	58.96	62.93	0.937
84/85	63.16	65.84	0.959	61.35	63.78	0.962
85/86	62.67	65.61	0.955	61.27	64.37	0.952
86/87	62.60	66.05	0.948	60.79	63.83	0.952
87/88	62.07	64.46	0.963	59.77	61.89	0.966
88/89	62.00	63.88	0.971	59.70	61.43	0.972
89/90	59.64	63.47	0.940	57.31	60.34	0.950
90/91	59.35	63.10	0.941	57.60	60.84	0.947
91/92	59.56	63.26	0.942	57.54	60.66	0.949
92/93	60.07	63.18	0.951	58.07	61.00	0.952
93/94	60.16	63.09	0.954	57.90	61.13	0.947

EI makes much of its estimate that nearly a million viewers turned off their sets during the access period in response to PTAR. Williamson and Woroch show that this estimate fails to account for trends in the growth in the number of television households and the likelihood that new viewers spent less time watching television than those who purchased sets before them. But even if we accept the EI estimate as valid, an extension of EI's analysis to consider later years shows that by 1984 the missing viewers had turned their sets back on.

To produce a dollar estimate of the cost to viewers of the network programs eliminated by PTAR, EI relied on estimates of the dollar amounts viewers attributed to free over-the-air network and independent signals by Noll, Peck, and McGowan⁷⁵. Noll, Peck and McGowan (NPM) reported these estimates as percentages of viewer income. EI's calculation of lost viewer surplus begins with the NPM estimate that viewers valued three network signals at 5.07 percent of income (EI rounded to 5.1) and three independent signals at 1.34 percent of income (EI rounded to 1.3). Assuming that the syndicated programs that replaced network programs during the access period had the same value as would programs on three independent stations, EI subtracted the 1.34 percent-of-income for independent stations from the 5.07 percent for network affiliates to get a net loss of 3.73 percent-of-income (rounded to 3.7).

EI estimated an \$8.5 billion loss in viewer surplus annually due to PTAR. This estimate was produced by multiplying the 3.7 percent of income estimate of the amount by which viewers valued three affiliate signals over three independent signals times the 57% of network viewing that occurred in prime time times 1971 per capita income of \$4,302 times 3.1 persons per household times the 62.2 million households in the United States in 1971. From this, EI arrived at an estimate of a \$2.5 billion loss per year in 1971 dollars (Adjusting for inflation in the intervening years yields an \$8.5 billion loss annually in 1994 dollars). This figure is the basis for EI's \$200 billion plus estimate of the cumulative cost of PTAR to viewers from 1971 to the present.

⁷⁵ Noll, Roger G., Merton J. Peck, and John J. Gowan (1973), Economic Aspects of Television Regulation, The Brookings Institution.

Williamson and Woroch correctly point out in their reply comments that the sample of cable systems employed by NPM to estimate the viewer valuations used by EI could in no way be considered to provide a nationally representative sample of viewers in 1969, the year for which NPM collected their data. Furthermore, the substantial changes in industry structure that have occurred since then make it impossible to know what relative weights viewers would attribute to affiliate and independent station signals. Independents have gained audience relative to network affiliates since that time, so it would seem reasonable to increase the value attributed to independent signals.

However, even if these problems are ignored, the EI methodology would still produce grossly inflated estimates of the loss to viewers associated with "lost" network programs in the access period. EI's welfare loss estimate suffers from two fundamental flaws: (1) The daily half hours of network programming lost by network affiliates are treated as if their contribution to viewer welfare was equal to the average value of prime time network programs. Because these half hours represent a marginal loss of network programming, EI instead should have used NPM's estimate of the value of a marginal network. The same criticism applies to EI's use of the value of three independent signals rather than an estimate of the value of independent station programming at the margin, although EI's measure of the value of access period programming on affiliates suffers from a more fundamental flaw. (2) The syndicated programs replacing network programs on affiliates during the access period were treated as if they had the same value as programs on independent stations, when in fact access period programs on affiliates were more popular and drew much larger audiences than their counterparts on independent stations. Once EI's methodology is corrected for these two fundamental flaws, the historical

opportunity cost of lost network programs in the access period is shown to be surprisingly small, while on a current, ongoing basis, it is zero.

We will start with the second methodological flaw in correcting EI's estimate. If we follow EI and assume that relative ratings provide a reasonable approximation of the relative consumer surplus contributions of different programs, then it is quite apparent that syndicated access period programs on affiliates contributed much more to viewer welfare than did the programs on independent stations during this time period. The data underlying the NPM surplus estimates employed by EI were all collected prior to PTAR. Arbitron ratings data collected by LECG⁷⁶ shows that for independent stations in the top 30 markets, November 1970 ratings averaged 3.2 during the 7:30-8:00 PM time period compared with an average rating of 16.1 for network affiliates in these markets. So independent station audiences were approximately 20% the size of network audiences during the access period during the last pre-PTAR year. By contrast, EI's calculation based on A.C. Nielsen data show that the syndicated programs run by affiliates in the 7:30-8:00 evening time slot during the 1971/72 season drew audiences 98.4% as large as those of the network programs they replaced, when the standard of comparison is the audiences attracted by the networks' 8:00-8:30 PM programs.⁷⁷ Using the relative ratings approach EI employed to allocate the surplus associated with network schedules among

⁷⁶ This data set is described in detail in LECG's initial comments in this proceeding.

⁷⁷ Economists, Inc. (1995), at pp. 39 and 40 of their initial comments ("An Economic Analysis of the Prime Time Access Rule," MM Docket No. 94-123, March 7, 1995), reports that for network affiliates 7:30-8:00 PM ratings averaged .954 of 8:00-8:30 PM ratings for the 1969/70 and 1970/71 seasons and this ratio fell to .939 during the 1972/73 season, following PTAR. $.939/.954 = .984$.

dayparts, access programs on affiliates were worth only 1.6% less to viewers than the network programs they replaced.

Making this correction reduces EI's calculation of the viewer surplus lost due to the substitution of syndicated programs for network programs during the access period from \$2.5 billion to \$54.7 million per year. Using the same deflator as EI, this would be \$186 million in 1994 dollars.⁷⁸ With this correction alone, the \$200 billion cumulative loss is reduced to approximately \$4.4 billion.

In the same table in their 1973 book from which EI got the 5.07% percent of income estimate as the value of three network signals, NPM report estimates of the marginal value of a third and fourth network signal to viewers of 1.01% of income and .76% of income, respectively. It seems most appropriate to view the loss of one-seventh of the networks' prime time schedules as the loss of network programming at the margin. If we take the simple average of these two figures as an estimate of the lost network access period programs to viewers, we get .885% of income as the average of the marginal values of a third and a fourth network. Multiplying by three for the number of affiliates losing network programs from 7:30 to 8:00 PM, we have 2.655% of income as the figure that should have been used instead of the 5.07% of income employed by EI. Therefore the correction of EI's measure calculated immediately above should be adjusted by a factor of 2655/5070. The final corrected figure is \$28.6 million annually in 1971 dollars or \$97.4 million in 1994 dollars. The cumulative loss is

⁷⁸ $0.0507 \times 62.1 \text{ million households} \times .57 \text{ (percent of network viewing in prime time)} \times \$4,302 \text{ per capita income} \times 3.1 \text{ persons per household} \times 1/7 \text{ (access period as fraction of prime time)} \times .016 = \$54.7 \text{ million per year in 1971 dollars. EI calculated the 1994 equivalent of } \$2.5 \text{ billion in 1971 as } \$8.5 \text{ billion. } 8.5/2.5 \times \$54.7 = \$186 \text{ million.}$

now reduced to \$2.3 billion, approximately one hundredth the amount claimed by EI.

Of course even this is a substantial overestimate, since by the mid-1980s affiliates' access period programs were doing as well relative to network programs later in prime time as had network programs broadcast in the access period prior to PTAR. So not only is the actual loss considerably smaller than even the \$2.3 billion estimate,⁷⁹ but this cost is sunk and behind us. By these measures the opportunity cost going forward is zero.

These corrected estimates of the opportunity cost of network programs lost during the access period say nothing about the contributions to surplus of independent stations and new networks gained due to PTAR. Accepting the above noted caveats regarding the NPM data, we can use the NPM estimates of the incremental gain to viewers from new independent stations to get a better feel for the relative values of the gains and loss due to PTAR. According to NPM, the first independent station is valued at .67% of income, a second independent is valued at .40% of income, a third independent is worth an additional .27% of income, and a fourth and a fifth independent would be worth .21 and .18% of income, respectively.

Expressed as a percent of income, the viewer opportunity cost of network programs lost due to PTAR is $2.655\% \text{ of income} \times .016 = .04\% \text{ of income}$ if we ignore the fact that first run programs in the access period are now as popular as

⁷⁹ \$1 billion is probably an upper bound for historical opportunity costs, and even this may be an artifact of the normal annual variation in the households using television ratio used by EI.

the network programs they replaced. This means that even if the likelihood that new independent stations enter local markets due to PTAR is fairly small, the expected net benefits of PTAR may still be positive and substantial. **Table IV-3** reports the minimum PTAR contribution to the probability of entry by a new independent station that is required for the expected benefits of new stations to exceed the loss viewers experience from losing network programs during one-seventh of prime time on affiliates. These probabilities are quite small. Even if the marginal independent is a fifth independent, the expected value of PTAR will be positive if the increase in the probability of entry due to PTAR is only 22%. (Because $.04 = .18 \times .22$) For a first independent station, PTAR only has to make a 6% contribution to the probability of entry to make a net (expected) contribution to viewer welfare.

Table IV-3
Only a Small Increase In the Probability of Entry by Independent Stations
Due to PTAR Makes Viewers Better Off

Additional Independent Stations	Incremental Contribution to Viewer Welfare (as % of Viewer Income)	Threshold Contribution to Probability of Entry
First	0.67	6%
Second	0.40	10%
Third	0.27	15%
Fourth	0.21	19%
Fifth	0.18	22%

When we factor in the role that new independent stations have played in the formation of new networks (whose programming is even more valuable to viewers) and the possibility that the programs shown during the remainder of

prime time are more attractive to viewers because PTAR made the access period available as a profitable secondary market, even lower contributions to the probability of entry are required for PTAR to produce a net gain in viewer welfare.

Although repeated (and unsubstantiated) claims to the contrary probably have led most people to believe the opportunity cost of network programs lost during the access period to be large, in retrospect the fact that it is so hard to demonstrate substantial (or even positive) opportunity costs for PTAR should not be so surprising. The opportunity cost of the programs the networks can't place in the access period is negligible because the first run syndicated programs that have replaced them have proven to be just as popular. This outcome would not be surprising to a student of television history, because the non fiction programs and variety programs (including game shows) that have proven so popular in the access period were a staple of the networks' prime time schedules in the period prior to PTAR. From 1961 through 1971 these two categories of programs accounted for from 20 percent to 32 percent of the networks' prime time schedules, with the high points occurring in 1970 and 1971.⁸⁰ Contrary to EI's assertion that game shows and other types of first run programs are cheap and unpopular, these programs are today what they were in the 1960s -- cheap (compared to other prime time programs) and popular. With the exception of 1972, average ratings for prime time variety and non fiction programs on the

⁸⁰ Wildman, S. S. and Robinson, K. S. (1995), "Network Programming and Off-Network Syndication Profits: Strategic Links and Implications for Television Policy," Journal of Media Economics, p. 31.

networks had higher average ratings than comedies and dramas during every television season from 1961 through 1974.⁸¹

It is also important to recognize that the advantages network programming has over syndication are relative, not absolute, and that syndication has advantages of its own. If networking was always the best way to go, we wouldn't see syndicated programs on network affiliates and independent stations would always organize into networks as long as there were two or more located in different cities. Yet network affiliates purchase and show substantial amounts of syndicated programs (even outside the access period) and experience has shown that the number of stations available to form a network has to be quite large for a network to be viable. Networking has a comparative advantage in putting together large, well-metered audiences during the heaviest viewing periods, but syndication has an advantage in aggregating audiences across time periods and markets to build larger audiences than would be possible with network-style simulcasting. Even before PTAR, the access period was on the cusp of prime time. The networks had already stopped providing traditional programming in the first half hour of the hour the networks had to give up prior to 1971. Even today, the last half hour of the early fringe period, which has an audience approaching that of the access period, is typically programmed with syndicated programs by network affiliates. Given these voluntary choices by network affiliates to use syndicated programs, it should not be surprising that today first run access period programs draw as well as did their network predecessors.

⁸¹ Ibid., p. 31.

V. SUMMARY AND CONCLUSIONS

PTAR has fulfilled and continues to fulfill its original goal of greater programming diversity. Local affiliate programming of the access period contributed to diversity in the short run under PTAR, but it is the growth in the number and quality of independent stations stimulated by PTAR that has fostered diversity in the long run. Eliminating either the off-network provision or the entire rule will reduce diversity because it will adversely affect independent television stations. Now, emerging networks built from the seed corn that PTAR fostered are adding a new dimension to programmatic diversity during prime time. It seems clear from our further econometric work that while there is a network effect that helps independent station ratings apart from PTAR, there is also a separate and significant PTAR effect. It is likely in addition that PTAR and networking mutually reinforce each other in improving the ratings of independent stations, thereby reducing the high risk and uncertainty associated with the multi-year task of building a national broadcast network.

The oft-heard criticism by Disney that the diversity goal of PTAR has been thwarted because a few shows like *Wheel of Fortune*, *Jeopardy!*, and *Entertainment Tonight* now dominate access period programming on local affiliates nationwide completely ignores the pro-competitive impact that national syndicators like King World, Viacom/Paramount and Fox as mini-networks have likely started to have on prime time network advertising prices. Even if such popular programs, considered in isolation, are not what the Commission originally intended as access period diversity on local affiliates, it must recognize that such popular programming formats developed only after years of trial and error in programming a very difficult time slot. They are shown

nationally because of their popularity in each and every locale, not because they are mandated for delivery between a major network and all its affiliates. Furthermore, the pro-competitive impact on network advertising prices of such nationally syndicated programming during the access period clearly outweighs any claimed loss of diversity on local affiliates. This is doubly true when one recognizes that access period diversity under PTAR is accomplished through the existence of independent television station programming.

PTAR has had a much more difficult history with intellectuals than it appears to have had with the general public. Obviously, the average citizen is not aware of PTAR, but the popularity of access period family oriented programming testifies to the success of the Rule amongst the general populace. By way of contrast, the prejudices of many economists surrounding the Rule's implementation were based, and continue to be based, more on emotion than analysis and careful, objective reasoning. It is correct for the Commission to have asked for quantitative analysis in this proceeding because the "game show" Rule, as economists have referred to it, has not been examined at all since shortly after its implementation in 1971/1972. LECG's March 7 economic report together with this surrebuttal form a more than adequate analytical record that in 1995, regulations that are working and that are in the public interest should be left alone.